

CLAIMS

1. A method for data transmission on a radio path (5) between two radio interfaces (9), which support a plurality of physical transmission modes at different bandwidths, comprising the steps of:
 - a) establishing a plurality of groups (14₁₂, 14₁₃, 14₁₄; 14a, 14b, 14c) of virtual paths (15) on the radio path (5), each having a warranted bandwidth, so that the sum of the bandwidths warranted to the groups does not exceed the total bandwidth of the radio path operating in a transmission mode referred to as basic mode,
 - b) detecting the transmission quality of the radio path (5), and, the transmission quality of the radio path permitting,
 - c) operating the radio path (5) in a transmission mode of higher bandwidth than that of the basic mode and using the bandwidth difference between the used mode and the basic mode for bandwidth need of the groups (14₁₂, 14₁₃, 14₁₄; 14a, 14b, 14c) of virtual paths (15) in excess of the warranted bandwidth.
2. The method in claim 1, characterised in that the radio path (5) is operated in the transmission mode having the highest bandwidth compatible with the detected transmission quality of the radio path (5).
3. The method of claim 1, characterised in that if the total bandwidth need of the groups (14₁₂, 14₁₃, 14₁₄; 14a, 14b, 14c) of virtual paths (15) is less than the bandwidth of the broadest one of the transmission modes compatible with the detected transmission

quality of the radio path (5), the most robust one of these compatible transmission modes is used, the bandwidth of which satisfies the total bandwidth need.

4. The method of claim 3, characterised in that small changes of the bandwidth need are satisfied by adapting the transmission power of the radio path (5).

5. The method of claim 3 or 4, characterised in that at least part of the data to be transmitted in a group (14₁₂, 14₁₃, 14₁₄; 14a, 14b, 14c) of virtual paths is buffered at the transmitter-side radio interface (9), and that the presently used transmission mode is found not to satisfy the total bandwidth need if the filling level of the buffer exceeds a limit value.

6. The method of claim 5, characterised in that the buffered data is data of at least one virtual path of unspecified bit rate.

7. The method according to any one of the preceding claims, characterised in that in each virtual group, the admission of a new communication is decided by a CAC method.

8. A data transmission network comprising a first group of nodes (1; 1a, 1b, 1c), a first radio interface (9) connected to the nodes (1; 1a, 1b, 1c) of the first group, a second group of nodes (2, 3, 4; 2a, 2b, 2c), a second radio interface (9) connected to the nodes of the second group, and a radio path (5) between the two radio interfaces (9), in which several groups (14₁₂, 14₁₃, 14₁₄; 14a, 14b, 14c) of virtual paths (15) of warranted

bandwidth are transmitted between one node (1; 1a, 1b, 1c) of the first group and one node (2, 3, 4; 2a, 2b, 2c) of the second group, wherein the sum of the bandwidths warranted to the groups (14_{12} , 14_{13} , 14_{14} ; 14a, 14b, 14c) of virtual paths does not exceed the total bandwidth of the radio path (5) when operated in a transmission mode referred to as basic mode, characterised in that the radio interfaces (9) support several physical transmission modes of different bandwidth and are adapted to detect the transmission quality of the radio path (5) and, the transmission quality of the radio path (5) permitting, to operate the radio path (5) in a transmission mode having a higher bandwidth than that of the basic mode, and to use the bandwidth difference between the used mode and the basic mode for bandwidth need of the groups of virtual paths in excess of the warranted bandwidth.